



RRRRRRRR	PPPPPPPP	GGGGGGGG	DDDDDDDD	SSSSSSSS	PPPPPPPP	LL	YY	YY
RRRRRRRR	PPPPPPPP	GGGGGGGG	DDDDDDDD	SSSSSSSS	PPPPPPPP	LL	YY	YY
RR RR	PP PP	GG	DD	DD	PP	LL	YY	YY
RR RR	PP PP	GG	DD	DD	PP	LL	YY	YY
RR RR	PP PP	GG	DD	DD	PP	LL	YY	YY
RR RR	PP PP	GG	DD	DD	PP	LL	YY	YY
RRRRRRRR	PPPPPPPP	GG	DD	DD	SSSSSS	PPPPPPPP	LL	YY
RRRRRRRR	PPPPPPPP	GG	DD	DD	SSSSSS	PPPPPPPP	LL	YY
RR RR	PP	GG	DD	DD	SS	PP	LL	YY
RR RR	PP	GG	DD	DD	SS	PP	LL	YY
RR RR	PP	GG	DD	DD	SS	PP	LL	YY
RR RR	PP	GG	DD	DD	SS	PP	LL	YY
RR RR	PP	GG	DD	DD	SS	PP	LL	YY
RR RR	PP	GG	DDDDDDDD	SSSSSSSS	PP	LLLLLLLL	YY	YY
RR RR	PP	GG	DDDDDDDD	SSSSSSSS	PP	LLLLLLLL	YY	YY
LL		SSSSSSSS					...	
LL		SSSSSSSS					...	
LL		SS					...	
LL		SS					...	
LL		SS					...	
LL		SSSSSS					...	
LL		SSSSSS					...	
LL		SS					...	
LL		SS					...	
LL		SS					...	
LLLLLLLL		SSSSSSSS					...	
LLLLLLLL		SSSSSSSS					...	

```
1 0001 0 MODULE RPG$DSPLY( %TITLE, 'DSPLY an item'  
2 0002 0 IDENT = '1-004'  
3 0003 0 ) =  
4 0004 1 BEGIN  
5 0005 1  
6 0006 1 *****  
7 0007 1 *  
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
9 0009 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.  
10 0010 1 * ALL RIGHTS RESERVED.  
11 0011 1 *  
12 0012 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED  
13 0013 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE  
14 0014 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER  
15 0015 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  
16 0016 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY  
17 0017 1 * TRANSFERRED.  
18 0018 1 *  
19 0019 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE  
20 0020 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT  
21 0021 1 * CORPORATION.  
22 0022 1 *  
23 0023 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS  
24 0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.  
25 0025 1 *  
26 0026 1 *  
27 0027 1 *****  
28 0028 1  
29 0029 1  
30 0030 1 ++  
31 0031 1  
32 0032 1 FACILITY: RPGII SUPPORT  
33 0033 1  
34 0034 1 ABSTRACT:  
35 0035 1  
36 0036 1 This module contains the RTL routine that supports the RPG DSPLY  
37 0037 1 opcode.  
38 0038 1  
39 0039 1 ENVIRONMENT: VAX/VMS user mode  
40 0040 1  
41 0041 1 AUTHOR: Debess Grabazs, CREATION DATE: 18-March-1983  
42 0042 1  
43 0043 1 MODIFIED BY:  
44 0044 1  
45 0045 1 1-001 - Original version. DG 18-Mar-1983.  
46 0046 1 1-002 - use routine COB$$_RET_A_AB_PREV to get address of COB$$AB_PREV.  
47 0047 1 MDL 29-Aug-1983  
48 0048 1 1-003 - Create temporary for overpunched numeric before calling  
49 0049 1 COB$ACC_SCR. In case of invalid entry, original value will  
50 0050 1 be saved. DG 30-Aug-1983.  
51 0051 1 1-004 - Set RPG for calls to both COB$ACC_SCR and COB$DISP_SCR.  
52 0052 1 DG 24-Oct-1983.  
53 0053 1  
54 0054 1 --  
55 0055 1 <BLF/PAGE>
```

```
57 0056 1 %SBTTL 'Declarations'  
58 0057 1 +  
59 0058 1 | PROLOGUE FILE:  
60 0059 1 | -  
61 0060 1 |  
62 0061 1 REQUIRE 'RTLIN:RPGPROLOG';  
63 0126 1 | Switches, PSECTs, macros,  
64 0127 1 | linkages and LIBRARYs  
65 0128 1 | +  
66 0129 1 | | LINKAGES  
67 0130 1 | | NONE  
68 0131 1 | | -  
69 0132 1 | +  
70 0133 1 | | TABLE OF CONTENTS:  
71 0134 1 | | -  
72 0135 1 | +  
73 0136 1 | | FORWARD ROUTINE  
74 0137 1 | | RPGSDSPLY: NOVALUE:  
75 0138 1 | | -  
76 0139 1 | +  
77 0140 1 | | INCLUDE FILES  
78 0141 1 | | NONE  
79 0142 1 | | -  
80 0143 1 | +  
81 0144 1 | | MACROS  
82 0145 1 | | NONE  
83 0146 1 | | -  
84 0147 1 | +  
85 0148 1 | | EQUATED SYMBOLS  
86 0149 1 | | NONE  
87 0150 1 | | -  
88 0151 1 | +  
89 0152 1 | | EXTERNAL REFERENCES  
90 0153 1 | | -  
91 0154 1 | +  
92 0155 1 | | EXTERNAL ROUTINE  
93 0156 1 | | COB$ACC SCR,  
94 0157 1 | | COB$DISP SCR,  
95 0158 1 | | COB$$RET_A_AB_PREV.  
96 0159 1 | | -  
97 0160 1 | | ACCEPT with conversion  
98 0161 1 | | DISPLAY with conversion  
99 0162 1 | | Return address of table giving  
100 0163 1 | | call history for advancing purposes  
101 0164 1 | | -  
102 0165 1 | | LIB$SIGNAL;  
103 0166 1 | | -  
104 0167 1 | | EXTERNAL LITERAL  
105 0168 1 | | RPGS_INVNUMENT;  
106 0169 1 | | -  
107 0170 1 | | EXTERNAL  
108 0171 1 | | RPG$BTZ;  
109 0172 1 | | -  
110 0173 1 | | ! Invalid numeric entry warning  
111 0174 1 | | -  
112 0175 1 | | ! Table for translate blank to zero  
113 0176 1 | | -  
114 0177 1 | | ! Signal warning and continue execution  
115 0178 1 | | -  
116 0179 1 | | ! Return address of table giving  
117 0180 1 | | call history for advancing purposes  
118 0181 1 | | -  
119 0182 1 | | ! ACCEPT with conversion  
120 0183 1 | | -  
121 0184 1 | | ! DISPLAY with conversion  
122 0185 1 | | -  
123 0186 1 | | ! Return address of table giving  
124 0187 1 | | call history for advancing purposes  
125 0188 1 | | -  
126 0189 1 | | ! Signal warning and continue execution  
127 0190 1 | | -  
128 0191 1 | | ! Invalid numeric entry warning  
129 0192 1 | | -  
130 0193 1 | | ! Table for translate blank to zero  
131 0194 1 | | -  
132 0195 1 | | ! Signal warning and continue execution  
133 0196 1 | | -  
134 0197 1 | | ! ACCEPT with conversion  
135 0198 1 | | -  
136 0199 1 | | ! DISPLAY with conversion  
137 0200 1 | | -  
138 0201 1 | | ! Return address of table giving  
139 0202 1 | | call history for advancing purposes  
140 0203 1 | | -  
141 0204 1 | | ! Signal warning and continue execution  
142 0205 1 | | -  
143 0206 1 | | ! Invalid numeric entry warning  
144 0207 1 | | -  
145 0208 1 | | ! Table for translate blank to zero  
146 0209 1 | | -  
147 0210 1 | | ! Signal warning and continue execution  
148 0211 1 | | -  
149 0212 1 | | ! ACCEPT with conversion  
150 0213 1 | | -  
151 0214 1 | | ! DISPLAY with conversion  
152 0215 1 | | -  
153 0216 1 | | ! Return address of table giving  
154 0217 1 | | call history for advancing purposes  
155 0218 1 | | -  
156 0219 1 | | ! Signal warning and continue execution  
157 0220 1 | | -  
158 0221 1 | | ! Invalid numeric entry warning  
159 0222 1 | | -  
160 0223 1 | | ! Table for translate blank to zero  
161 0224 1 | | -  
162 0225 1 | | ! Signal warning and continue execution  
163 0226 1 | | -  
164 0227 1 | | ! ACCEPT with conversion  
165 0228 1 | | -  
166 0229 1 | | ! DISPLAY with conversion  
167 0230 1 | | -  
168 0231 1 | | ! Return address of table giving  
169 0232 1 | | call history for advancing purposes  
170 0233 1 | | -  
171 0234 1 | | ! Signal warning and continue execution  
172 0235 1 | | -  
173 0236 1 | | ! Invalid numeric entry warning  
174 0237 1 | | -  
175 0238 1 | | ! Table for translate blank to zero  
176 0239 1 | | -  
177 0240 1 | | ! Signal warning and continue execution  
178 0241 1 | | -  
179 0242 1 | | ! ACCEPT with conversion  
180 0243 1 | | -  
181 0244 1 | | ! DISPLAY with conversion  
182 0245 1 | | -  
183 0246 1 | | ! Return address of table giving  
184 0247 1 | | call history for advancing purposes  
185 0248 1 | | -  
186 0249 1 | | ! Signal warning and continue execution  
187 0250 1 | | -  
188 0251 1 | | ! Invalid numeric entry warning  
189 0252 1 | | -  
190 0253 1 | | ! Table for translate blank to zero  
191 0254 1 | | -  
192 0255 1 | | ! Signal warning and continue execution  
193 0256 1 | | -  
194 0257 1 | | ! ACCEPT with conversion  
195 0258 1 | | -  
196 0259 1 | | ! DISPLAY with conversion  
197 0260 1 | | -  
198 0261 1 | | ! Return address of table giving  
199 0262 1 | | call history for advancing purposes  
200 0263 1 | | -  
201 0264 1 | | ! Signal warning and continue execution  
202 0265 1 | | -  
203 0266 1 | | ! Invalid numeric entry warning  
204 0267 1 | | -  
205 0268 1 | | ! Table for translate blank to zero  
206 0269 1 | | -  
207 0270 1 | | ! Signal warning and continue execution  
208 0271 1 | | -  
209 0272 1 | | ! ACCEPT with conversion  
210 0273 1 | | -  
211 0274 1 | | ! DISPLAY with conversion  
212 0275 1 | | -  
213 0276 1 | | ! Return address of table giving  
214 0277 1 | | call history for advancing purposes  
215 0278 1 | | -  
216 0279 1 | | ! Signal warning and continue execution  
217 0280 1 | | -  
218 0281 1 | | ! Invalid numeric entry warning  
219 0282 1 | | -  
220 0283 1 | | ! Table for translate blank to zero  
221 0284 1 | | -  
222 0285 1 | | ! Signal warning and continue execution  
223 0286 1 | | -  
224 0287 1 | | ! ACCEPT with conversion  
225 0288 1 | | -  
226 0289 1 | | ! DISPLAY with conversion  
227 0290 1 | | -  
228 0291 1 | | ! Return address of table giving  
229 0292 1 | | call history for advancing purposes  
230 0293 1 | | -  
231 0294 1 | | ! Signal warning and continue execution  
232 0295 1 | | -  
233 0296 1 | | ! Invalid numeric entry warning  
234 0297 1 | | -  
235 0298 1 | | ! Table for translate blank to zero  
236 0299 1 | | -  
237 0300 1 | | ! Signal warning and continue execution  
238 0301 1 | | -  
239 0302 1 | | ! ACCEPT with conversion  
240 0303 1 | | -  
241 0304 1 | | ! DISPLAY with conversion  
242 0305 1 | | -  
243 0306 1 | | ! Return address of table giving  
244 0307 1 | | call history for advancing purposes  
245 0308 1 | | -  
246 0309 1 | | ! Signal warning and continue execution  
247 0310 1 | | -  
248 0311 1 | | ! Invalid numeric entry warning  
249 0312 1 | | -  
250 0313 1 | | ! Table for translate blank to zero  
251 0314 1 | | -  
252 0315 1 | | ! Signal warning and continue execution  
253 0316 1 | | -  
254 0317 1 | | ! ACCEPT with conversion  
255 0318 1 | | -  
256 0319 1 | | ! DISPLAY with conversion  
257 0320 1 | | -  
258 0321 1 | | ! Return address of table giving  
259 0322 1 | | call history for advancing purposes  
260 0323 1 | | -  
261 0324 1 | | ! Signal warning and continue execution  
262 0325 1 | | -  
263 0326 1 | | ! Invalid numeric entry warning  
264 0327 1 | | -  
265 0328 1 | | ! Table for translate blank to zero  
266 0329 1 | | -  
267 0330 1 | | ! Signal warning and continue execution  
268 0331 1 | | -  
269 0332 1 | | ! ACCEPT with conversion  
270 0333 1 | | -  
271 0334 1 | | ! DISPLAY with conversion  
272 0335 1 | | -  
273 0336 1 | | ! Return address of table giving  
274 0337 1 | | call history for advancing purposes  
275 0338 1 | | -  
276 0339 1 | | ! Signal warning and continue execution  
277 0340 1 | | -  
278 0341 1 | | ! Invalid numeric entry warning  
279 0342 1 | | -  
280 0343 1 | | ! Table for translate blank to zero  
281 0344 1 | | -  
282 0345 1 | | ! Signal warning and continue execution  
283 0346 1 | | -  
284 0347 1 | | ! ACCEPT with conversion  
285 0348 1 | | -  
286 0349 1 | | ! DISPLAY with conversion  
287 0350 1 | | -  
288 0351 1 | | ! Return address of table giving  
289 0352 1 | | call history for advancing purposes  
290 0353 1 | | -  
291 0354 1 | | ! Signal warning and continue execution  
292 0355 1 | | -  
293 0356 1 | | ! Invalid numeric entry warning  
294 0357 1 | | -  
295 0358 1 | | ! Table for translate blank to zero  
296 0359 1 | | -  
297 0360 1 | | ! Signal warning and continue execution  
298 0361 1 | | -  
299 0362 1 | | ! ACCEPT with conversion  
300 0363 1 | | -  
301 0364 1 | | ! DISPLAY with conversion  
302 0365 1 | | -  
303 0366 1 | | ! Return address of table giving  
304 0367 1 | | call history for advancing purposes  
305 0368 1 | | -  
306 0369 1 | | ! Signal warning and continue execution  
307 0370 1 | | -  
308 0371 1 | | ! Invalid numeric entry warning  
309 0372 1 | | -  
310 0373 1 | | ! Table for translate blank to zero  
311 0374 1 | | -  
312 0375 1 | | ! Signal warning and continue execution  
313 0376 1 | | -  
314 0377 1 | | ! ACCEPT with conversion  
315 0378 1 | | -  
316 0379 1 | | ! DISPLAY with conversion  
317 0380 1 | | -  
318 0381 1 | | ! Return address of table giving  
319 0382 1 | | call history for advancing purposes  
320 0383 1 | | -  
321 0384 1 | | ! Signal warning and continue execution  
322 0385 1 | | -  
323 0386 1 | | ! Invalid numeric entry warning  
324 0387 1 | | -  
325 0388 1 | | ! Table for translate blank to zero  
326 0389 1 | | -  
327 0390 1 | | ! Signal warning and continue execution  
328 0391 1 | | -  
329 0392 1 | | ! ACCEPT with conversion  
330 0393 1 | | -  
331 0394 1 | | ! DISPLAY with conversion  
332 0395 1 | | -  
333 0396 1 | | ! Return address of table giving  
334 0397 1 | | call history for advancing purposes  
335 0398 1 | | -  
336 0399 1 | | ! Signal warning and continue execution  
337 0400 1 | | -  
338 0401 1 | | ! Invalid numeric entry warning  
339 0402 1 | | -  
340 0403 1 | | ! Table for translate blank to zero  
341 0404 1 | | -  
342 0405 1 | | ! Signal warning and continue execution  
343 0406 1 | | -  
344 0407 1 | | ! ACCEPT with conversion  
345 0408 1 | | -  
346 0409 1 | | ! DISPLAY with conversion  
347 0410 1 | | -  
348 0411 1 | | ! Return address of table giving  
349 0412 1 | | call history for advancing purposes  
350 0413 1 | | -  
351 0414 1 | | ! Signal warning and continue execution  
352 0415 1 | | -  
353 0416 1 | | ! Invalid numeric entry warning  
354 0417 1 | | -  
355 0418 1 | | ! Table for translate blank to zero  
356 0419 1 | | -  
357 0420 1 | | ! Signal warning and continue execution  
358 0421 1 | | -  
359 0422 1 | | ! ACCEPT with conversion  
360 0423 1 | | -  
361 0424 1 | | ! DISPLAY with conversion  
362 0425 1 | | -  
363 0426 1 | | ! Return address of table giving  
364 0427 1 | | call history for advancing purposes  
365 0428 1 | | -  
366 0429 1 | | ! Signal warning and continue execution  
367 0430 1 | | -  
368 0431 1 | | ! Invalid numeric entry warning  
369 0432 1 | | -  
370 0433 1 | | ! Table for translate blank to zero  
371 0434 1 | | -  
372 0435 1 | | ! Signal warning and continue execution  
373 0436 1 | | -  
374 0437 1 | | ! ACCEPT with conversion  
375 0438 1 | | -  
376 0439 1 | | ! DISPLAY with conversion  
377 0440 1 | | -  
378 0441 1 | | ! Return address of table giving  
379 0442 1 | | call history for advancing purposes  
380 0443 1 | | -  
381 0444 1 | | ! Signal warning and continue execution  
382 0445 1 | | -  
383 0446 1 | | ! Invalid numeric entry warning  
384 0447 1 | | -  
385 0448 1 | | ! Table for translate blank to zero  
386 0449 1 | | -  
387 0450 1 | | ! Signal warning and continue execution  
388 0451 1 | | -  
389 0452 1 | | ! ACCEPT with conversion  
390 0453 1 | | -  
391 0454 1 | | ! DISPLAY with conversion  
392 0455 1 | | -  
393 0456 1 | | ! Return address of table giving  
394 0457 1 | | call history for advancing purposes  
395 0458 1 | | -  
396 0459 1 | | ! Signal warning and continue execution  
397 0460 1 | | -  
398 0461 1 | | ! Invalid numeric entry warning  
399 0462 1 | | -  
400 0463 1 | | ! Table for translate blank to zero  
401 0464 1 | | -  
402 0465 1 | | ! Signal warning and continue execution  
403 0466 1 | | -  
404 0467 1 | | ! ACCEPT with conversion  
405 0468 1 | | -  
406 0469 1 | | ! DISPLAY with conversion  
407 0470 1 | | -  
408 0471 1 | | ! Return address of table giving  
409 0472 1 | | call history for advancing purposes  
410 0473 1 | | -  
411 0474 1 | | ! Signal warning and continue execution  
412 0475 1 | | -  
413 0476 1 | | ! Invalid numeric entry warning  
414 0477 1 | | -  
415 0478 1 | | ! Table for translate blank to zero  
416 0479 1 | | -  
417 0480 1 | | ! Signal warning and continue execution  
418 0481 1 | | -  
419 0482 1 | | ! ACCEPT with conversion  
420 0483 1 | | -  
421 0484 1 | | ! DISPLAY with conversion  
422 0485 1 | | -  
423 0486 1 | | ! Return address of table giving  
424 0487 1 | | call history for advancing purposes  
425 0488 1 | | -  
426 0489 1 | | ! Signal warning and continue execution  
427 0490 1 | | -  
428 0491 1 | | ! Invalid numeric entry warning  
429 0492 1 | | -  
430 0493 1 | | ! Table for translate blank to zero  
431 0494 1 | | -  
432 0495 1 | | ! Signal warning and continue execution  
433 0496 1 | | -  
434 0497 1 | | ! ACCEPT with conversion  
435 0498 1 | | -  
436 0499 1 | | ! DISPLAY with conversion  
437 0500 1 | | -  
438 0501 1 | | ! Return address of table giving  
439 0502 1 | | call history for advancing purposes  
440 0503 1 | | -  
441 0504 1 | | ! Signal warning and continue execution  
442 0505 1 | | -  
443 0506 1 | | ! Invalid numeric entry warning  
444 0507 1 | | -  
445 0508 1 | | ! Table for translate blank to zero  
446 0509 1 | | -  
447 0510 1 | | ! Signal warning and continue execution  
448 0511 1 | | -  
449 0512 1 | | ! ACCEPT with conversion  
450 0513 1 | | -  
451 0514 1 | | ! DISPLAY with conversion  
452 0515 1 | | -  
453 0516 1 | | ! Return address of table giving  
454 0517 1 | | call history for advancing purposes  
455 0518 1 | | -  
456 0519 1 | | ! Signal warning and continue execution  
457 0520 1 | | -  
458 0521 1 | | ! Invalid numeric entry warning  
459 0522 1 | | -  
460 0523 1 | | ! Table for translate blank to zero  
461 0524 1 | | -  
462 0525 1 | | ! Signal warning and continue execution  
463 0526 1 | | -  
464 0527 1 | | ! ACCEPT with conversion  
465 0528 1 | | -  
466 0529 1 | | ! DISPLAY with conversion  
467 0530 1 | | -  
468 0531 1 | | ! Return address of table giving  
469 0532 1 | | call history for advancing purposes  
470 0533 1 | | -  
471 0534 1 | | ! Signal warning and continue execution  
472 0535 1 | | -  
473 0536 1 | | ! Invalid numeric entry warning  
474 0537 1 | | -  
475 0538 1 | | ! Table for translate blank to zero  
476 0539 1 | | -  
477 0540 1 | | ! Signal warning and continue execution  
478 0541 1 | | -  
479 0542 1 | | ! ACCEPT with conversion  
480 0543 1 | | -  
481 0544 1 | | ! DISPLAY with conversion  
482 0545
```

```
109      0171 1 %SBTTL 'RPG$DSPLY - DSPLY an item'
110      0172 1 GLOBAL ROUTINE RPG$DSPLY(
111      0173 1
112      0174 1           FLAGS,
113      0175 1           DISPLAY FIELD:  REF BLOCK[,BYTE],
114      0176 1           ACCEPT FIELD:  REF BLOCK[,BYTE]
115      0177 1           ): NOVALUE =
116      0178 1           ++
117      0179 1
118      0180 1           FUNCTIONAL DESCRIPTION:
119      0181 1           This routine supports the RPG DSPLY opcode.
120      0182 1
121      0183 1           CALLING SEQUENCE:
122      0184 1           CALL RPG$DSPLY (flags.fl.v [,display_field.rx.dx]
123      0185 1                   [,accept_field.mx.dx])
124      0186 1
125      0187 1           FORMAL PARAMETERS:
126      0188 1
127      0189 1           flags
128      0190 1                   bit 0 is set on if a comma should be
129      0191 1                   used in place of decimal point; bit 1
130      0192 1                   is set on if blanks in an overpunched
131      0193 1                   numeric field should be treated as
132      0194 1                   equivalent to zeroes.
133      0195 1
134      0196 1           display_field
135      0197 1                   data item whose value is displayed.
136      0198 1
137      0199 1           accept_field
138      0200 1                   data item whose value is displayed and
139      0201 1                   a new value is accepted into.
140      0202 1
141      0203 1           IMPLICIT INPUTS:
142      0204 1           NONE
143      0205 1
144      0206 1           IMPLICIT OUTPUTS:
145      0207 1           NONE
146      0208 1
147      0209 1           ROUTINE VALUE:
148      0210 1
149      0211 1           NONE
150      0212 1
151      0213 1
152      0214 1           SIDE EFFECTS:
153      0215 1           NONE
154      0216 1
155      0217 1
156      0218 1           NONE
: 156      0218 1           --
```

```

158      0219  2      BEGIN
159      0220  2
160      0221  2      LITERAL
161      0222  2          TRUE      = 1,
162      0223  2          DISP      = 0,
163      0224  2
164      0225  2          DEC_IS_COMMAS_BIT = 1,
165      0226  2          BTZ_BIT    = 2
166      0227  2          CONVERT_BIT = 32,
167      0228  2          COMMA_BIT   = 64,
168      0229  2          PROTECT_BIT = 256,
169      0230  2          RPG_BIT     = 2048:
170
171      0231  2
172      0232  2
173      0233  2
174      0234  2
175      0235  2
176      0236  2
177      0237  2
178      0238  2      FLAG,
179      0239  2      NRO_FLAG : INITIAL (0),
180      0240  2      TEMP_NRO : BLOCK [12,BYTE] VOLATILE.
181      0241  2      TEMP_STRING : VECTOR [15,BYTE];
182      0242  2
183      0243  2      BUILTIN
184      0244  2          ACTUALCOUNT;
185      0245  2
186      0246  2
187      0247  2
188      0248  2      +
189      0249  2      Get address of history of previous call.
190      0250  2      Note that using it this way will affect the whole longword
191      0251  2      at the address, and not just the first byte.
192      0252  2
193      0253  2      -
194      0254  2          COB$SAB_PREV = COB$SRET_A_AB_PREV();
195      0255  2
196      0256  2
197      0257  2      +
198      0258  2      Set up FLAG parameter.
199      0259  2
200      0260  2
201      0261  2      FLAG = CONVERT_BIT + RPG_BIT;
202      0262  2      IF (.FLAGS AND DEC_IS_COMMAS_BIT) NEQ 0      ! Conversion and RPG
203      0263  2      THEN FLAG = .FLAG + COMMA_BIT;                      ! Decimal is comma
204      0264  2
205      0265  2
206      0266  2      +
207      0267  2      Deal with DISPLAY_FIELD.
208      0268  2
209      0269  2      -
210      0270  2          IF .DISPLAY_FIELD NEQ 0
211      0271  3          THEN
212      0272  3          BEGIN
213      0273  3          IF (.DISPLAY_FIELD[DSC$B_DTYPE] EQL DSC$K_DTYPE_NRO) AND
214      0274  4              ((.FLAGS AND BTZ_BIT) NEQ 0)
215      0275  3          THEN

```

```
215      0276 3
216      0277 3
217      0278 3
218      0279 3
219      0280 3
220      0281 3
221      0282 3
222      0283 3
223      0284 3
224      0285 3
225      0286 3
226      0287 3
227      0288 3
228      0289 3
229      0290 3
230      0291 3
231      0292 3
232      0293 3
233      0294 3
234      0295 3
235      0296 3
236      0297 3
237      0298 3
238      0299 3
239      0300 3
240      0301 4
241      0302 3
242      0303 3
243      0304 3
244      0305 3
245      0306 3
246      0307 3
247      0308 3
248      0309 3
249      0310 3
250      0311 3
251      0312 3
252      0313 3
253      0314 3
254      0315 3
255      0316 3
256      0317 3
257      0318 3
258      0319 3
259      0320 3
260      0321 4
261      0322 4
262      0323 4
263      0324 4
264      0325 4
265      0326 4
266      0327 4
267      0328 4
268      0329 4
269      0330 4
270      0331 4
271      0332 5

      + Convert blanks to zeroes if flag is set.
      CH$TRANSLATE (RPG$BTZ,
                      DISPLAY_FIELD[DSC$W_LENGTH], DISPLAY_FIELD[DSC$A_POINTER],
                      0, .DISP[AY_FIELD[DSC$W_LENGTH]], .DISP[AY_FIELD[DSC$A_POINTER]]);

      COB$SAB_PREV = DISP;           ! Set up history for proper advancing
      + Display the field.
      - COB$DISP_SCR (1, .DISPLAY_FIELD, .FLAG);
      END;

      + Deal with ACCEPT_FIELD.
      - IF (ACTUALCOUNT() EQL 3 AND .ACCEPT_FIELD NEQ 0)
      THEN
          BEGIN
              IF (.ACCEPT_FIELD[DSC$B_DTYPE] EQL DSC$K_DTYPE_NRO) AND
                  ((.FLAGS AND BTZ_BIT) NEQ 0)
              THEN
                  + Convert blanks to zeroes if flag is set.
                  CH$TRANSLATE (RPG$BTZ,
                                  ACCEPT_FIELD[DSC$W_LENGTH], ACCEPT_FIELD[DSC$A_POINTER],
                                  0, .ACCEPT_FIELD[DSC$W_LENGTH], .ACCEPT_FIELD[DSC$A_POINTER]);
                  COB$SAB_PREV = DISP;           ! Set up history for proper advancing
                  + Display the field.
                  - COB$DISP_SCR (1, .ACCEPT_FIELD, .FLAG);
                  FLAG = .FLAG OR PROTECT_BIT;   ! Protect
                  WHILE TRUE DO
                      + Keep ACCEPTing until successful.
                      - BEGIN
                          BIND
                          ZERO = UPLIT ('0');

                          COB$SAB_PREV = DISP;           ! Set up history for proper advancing
                          IF .ACCEPT_FIELD [DSC$B_DTYPE] EQL DSC$K_DTYPE_NRO
                          THEN
                              NRO_FLAG = TRUE;
                          IF .NRO_FLAG
                          THEN
                              BEGIN
```

```
272      0333 5
273      0334 5
274      0335 5
275      0336 5
276      0337 5
277      0338 5
278      0339 5
279      0340 5
280      0341 5
281      0342 5
282      0343 5
283      0344 6
284      0345 6
285      0346 6
286      0347 6
287      0348 6
288      0349 6
289      0350 6
290      0351 5
291      0352 5
292      0353 5
293      0354 5
294      0355 5
295      0356 5
296      0357 5
297      0358 5
298      0359 5
299      0360 5
300      0361 4
301      0362 4
302      0363 4
303      0364 4
304      0365 4
305      0366 6
306      0367 6
307      0368 5
308      0369 5
309      0370 4
310      0371 4
311      0372 5
312      0373 5
313      0374 5
314      0375 5
315      0376 5
316      0377 5
317      0378 5
318      0379 4
319      0380 4
320      0381 3
321      0382 3
322      0383 3
323      0384 3
324      0385 3
325      0386 3
326      0387 3
327      0388 3
328      0389 3

      + Overpunched numeric string must be saved because
      COB$ACC SCR zeroes it out and if there is invalid
      input, the original string must be available in
      case the user responds to the reprompt with a <CR>.

      - TEMP_NRO [DSC$W_LENGTH] = .ACCEPT_FIELD [DSC$W_LENGTH];
      TEMP_NRO [DSC$B_DTYPE] = DSC$K_DTYPE_NRO;
      TEMP_NRO [DSC$A_POINTER] = TEMP_STRING;
      IF .ACCEPT_FIELD [DSC$B_CLASS] EQL DSC$K_CLASS_SD
      THEN
        BEGIN
          TEMP_NRO [DSC$B_CLASS] = DSC$K_CLASS_SD;
          TEMP_NRO [DSC$B_SCALE] = .ACCEPT_FIELD [DSC$B_SCALE];
          TEMP_NRO [DSC$B_DIGITS] = .ACCEPT_FIELD [DSC$B_DIGITS];
        END
      ELSE
        TEMP_NRO [DSC$B_CLASS] = DSC$K_CLASS_S;

      + Initialize the temporary string.

      - CH$MOVE (.ACCEPT_FIELD [DSC$W_LENGTH],
                 .ACCEPT_FIELD [DSC$A_POINTER],
                 TEMP_STRING);

      END;

      + Accept into the field.

      - IF ( COB$ACC_SCR (0, (IF .NRO_FLAG
                               THEN TEMP_NRO
                               ELSE .ACCEPT_FIELD),
                           .FLAG, 0, 0, 0, 0) )
      THEN EXITLOOP
      ELSE
        BEGIN
          + Error - print warning and re-prompt.

          - LIB$SIGNAL (RPG$_INVNUMENT);
          .COB$SAB_PREV = DISP;           ! Set up history for proper advancing

        END;
      END;

      IF .NRO_FLAG
      THEN
        + Move accepted string from temporary to actual accept field.

        - CH$MOVE (.ACCEPT_FIELD [DSC$W_LENGTH], TEMP_STRING,
                   .ACCEPT_FIELD [DSC$A_POINTER]);
```

RPG\$DSPLY  
1-004

DSPLY an item  
RPG\$DSPLY - DSPLY an item

K 12  
16-Sep-1984 02:13:33  
14-Sep-1984 13:04:17 VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPGDSPLY.B32;1

Page 7  
(4)

329 0390 3  
330 0391 2  
331 0392 2  
332 0393 1  
END;  
END;

.TITLE RPG\$DSPLY DSPLY an item  
.IDENT \1-004\

.PSECT \_RPG\$CODE,NOWRT, SHR, PIC,2

00 00 00 30 00000 P.AAA: .ASCII \0\<0>\<0>\<0>

ZERO=

P.AAA

.EXTRN COB\$ACC\_SCR, COB\$DISP\_SCR  
.EXTRN COB\$SRET\_A\_AB\_PREV  
.EXTRN LIB\$SIGNAL, RPG\$\_INVNUMENT  
.EXTRN RPG\$BTZ

OFFC 00000

.ENTRY RPG\$DSPLY, Save R2,R3,R4,R5,R6,R7,R8,R9,-  
R10,R11

0172

MOVAB COB\$DISP\_SCR, R11

MOVAB RPG\$BTZ, R10

SUBL2 #28, SP

CLRL NRO\_FLAG

CALLS #0, COB\$SRET\_A\_AB\_PREV

0219

MOVZWL R0, COB\$SAB\_PREV

0253

MOVAB #2080, FLAG

0260

BLBC FLAGS, 1\$

0261

MOVAB 64(R7), FLAG

0262

MOVL DISPLAY\_FIELD, R6

0269

BEQL 3\$

0273

CMPB 2(R6), #19

0274

BNEQ 2\$

0281

BBC #33, FLAGS, 2\$

0283

MOVTC (R6), @4(R6), #0, RPG\$BTZ, (R6), @4(R6)

0287

CLRL (COB\$SAB\_PREV)

0296

MOVQ R6, -(SP)

0300

PUSHL #1

0301

CALLS #3, COB\$DISP\_SCR

0308

CMPB (AP), #3

0310

BEQL 4\$

0314

RET

TSTL ACCEPT\_FIELD

BNEQ 5\$

RET

MOVL ACCEPT\_FIELD, R6

0310

CMPB 2(R6), #19

0314

BNEQ 6\$

BBC #33, FLAGS, 6\$

0310

MOVTC (R6), @4(R6), #0, RPG\$BTZ, (R6), @4(R6)

0314

CLRL (COB\$SAB\_PREV)

MOVQ R6, -(SP)

PUSHL #1

CALLS #3, COB\$DISP\_SCR

RPG\$DSPLY  
1-004DSPLY an item  
RPG\$DSPLY - DSPLY an itemL 12  
16-Sep-1984 02:13:33  
14-Sep-1984 13:04:17  
VAX-11 Bliss-32 V4.0-742  
[RFGRTL.SRC]RPGDSPLY.B32;1Page 8  
(4)

57	0100	8F	A8	0007C	7\$:	BISW2	#256, FLAG	: 0316		
13	02	69	D4	00081		CLRL	(COB\$\$AB_PREV)	: 0326		
		13	A6	91	00083	CMPB	2(R6), #T9	: 0327		
				03	12	BNEQ	8\$			
			58	01	D0	00089	MOVL	#1, NRO FLAG	: 0329	
10	AE	2B	58	E9	0008C	8\$:	BLBC	NR0 FLAG, 11\$	: 0330	
12	AE		66	B0	0008F	MOVW	(R6), TEMP_NRO	: 0339		
14	AE		13	90	00093	MOVVB	#19, TEMP_NRO+2	: 0340		
	09		6E	9E	00097	MOVAB	TEMP_STRING, TEMP_NRO+4	: 0341		
			A6	91	0009B	CMPB	3(R6), #9	: 0342		
			10	12	0009F	BNEQ	9\$			
13	AE		09	90	000A1	MOVVB	#9, TEMP_NRO+3	: 0346		
18	AE		08	A6	90	000A5	MOVVB	8(R6), TEMP_NRO+8	: 0347	
19	AE		09	A6	90	000AA	MOVVB	9(R6), TEMP_NRO+9	: 0348	
			04	11	000AF	BRB	10\$	: 0342		
6E	13	AE	01	90	000B1	9\$:	MOVVB	#1, TEMP_NRO+3	: 0352	
	04	B6	66	28	000B5	10\$:	MOVCA3	(R6), @4(R6), TEMP_STRING	: 0357	
			7E	7C	000BA	11\$:	CLRQ	-(SP)	: 0366	
			7E	7C	000BC	CLRQ	-(SP)			
			57	DD	000BE	PUSHL	FLAG	: 0369		
	08		58	E9	000C0	BLBC	NRO FLAG, 12\$			
	50		50	AE	9E	000C3	MOVAB	TEMP_NRO, R0	: 0366	
			50	DD	000C7	PUSHL	R0			
			02	11	000C9	BRB	13\$			
			56	DD	000CB	12\$:	PUSHL	R6	: 0368	
			7E	D4	000CD	13\$:	CLRQ	-(SP)	: 0366	
00000000G	00		07	FB	000CF	CALLS	#7, COB\$ACC_SCR			
	11		50	E8	000D6	BLBS	R0, 14\$			
00000000G	00	00000000G	8F	DD	000D9	PUSHL	#RPG\$ INVNUMT	: 0376		
			01	FB	000DF	CALLS	#1, LIB\$SIGNAL			
			69	D4	000E6	CLRL	(COB\$\$AB_PREV)	: 0377		
			97	11	000E8	BRB	7\$	: 0317		
04	B6		05	58	E9	000EA	14\$:	BLBC	NRO FLAG, 15\$	: 0383
			6E	66	28	000ED	15\$:	MOVCA3	(R6), TEMP_STRING, @4(R6)	: 0389
				04	000F2	RET			: 0393	

: Routine Size: 243 bytes, Routine Base: \_RPG\$CODE + 0004

: 333 0394 1  
: 334 0395 0 END ELUDOM

## PSECT SUMMARY

Name	Bytes	Attributes
_RPG\$CODE	247	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

## Library Statistics

RPG\$DSPLY  
1-004

DSPLY an item  
RPG\$DSPLY - DSPLY an item

M 12

16-Sep-1984 02:13:33  
14-Sep-1984 13:04:17

VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPGDSPLY.B32;1

Page 9  
(4)

File

File	Total	Symbols	Percent	Pages	Processing
	Total	Loaded	Percent	Mapped	Time
-\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	9	0	581	00:01.0
-\$255\$DUA28:[RPGRTL.OBJ]RPGLIB.L32;1	54	0	0	9	00:00.1

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LISS:RPGDSPLY/OBJ=OBJ\$:RPGDSPLY MSRC\$:RPGDSPLY/UPDATE=(ENH\$:RPGDSPLY)

Size: 243 code + 4 data bytes  
Run Time: 00:07.3  
Elapsed Time: 00:25.5  
Lines/CPU Min: 3259  
Lexemes/CPU-Min: 14079  
Memory Used: 103 pages  
Compilation Complete

0331 AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY

RMS0TRUNC  
LIS

STARFLNM  
LIS

RPGCUTPTO  
LIS

RPGHANDLE  
LIS

RPGMOVE1  
LIS

RMSGBL  
LIS

RPGRTL

RPGDSPLY  
LIS

RPGRTL  
MAP

RPGPROLOG  
REQ

RPGEXTIND  
LIS

RPGLIB  
LIS

RMS0RCH  
LIS

RMS0WAIT  
LIS

RPGBTZ  
LIS

RPGMOVE2  
LIS

RMS0UPDAT  
LIS

RPGDEF  
REQ

RPGDIVIDE  
LIS

RPGIOEXCE  
LIS

RPGERROR  
LIS